AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A safety bus system, comprising:

a plurality of first bus-capable modules, each being connected to at least one sensor and at least one actuator, said sensor configured to sense operational characteristics of a respective machine component in an operating machine and said actuator configured to actuate said respective machine component;

at least one second bus-capable module connected to at least one safety function;

at least one bus controller configured to control the respective machine components via the corresponding first bus-capable modules; and

at least one bus line interconnecting the first and second bus-capable modules and the at least one bus controller,

wherein when the safety function is selected, the bus-controller variably controls the respective machine components based on the sensed operational characteristics and a type of the safety function such that a number of various flexible safety concepts are applied to the operating machine.

2. (Previously Presented) The safety bus system of claim 1, wherein signals on the bus line are analog signals.

3. (Previously Presented) The safety bus system of claim 1, wherein signals on the bus line are digital signals.

4. (Previously Presented) The safety bus system of claim 1, wherein the safety function is at least one from a safety window, an enclosure switch, or an emergency stop function.

5. (Previously Presented) The safety bus system of claim 1, wherein the first and second bus-capable modules further comprise a display configured to display information to an operator.

6. (Canceled).

7. (Previously Presented) The safety bus system of claim 1, wherein the safety function is a switch, a button, or emergency off switch.

8. (Previously Presented) The safety bus system of claim 1, wherein at least one from the first and second bus-capable modules further includes at least one signaling mechanism.

9. (Previously Presented) The safety bus system of claim 8, wherein the at least one signaling mechanism produces an optical, acoustic or mechanical signal.

10. (Canceled).

11. (Previously Presented) The safety bus system of claim 1, wherein the actuators comprise electromechanical, electromagnetic, piezoelectric, pneumatic, or hydraulic actuators.

12. (Original) The safety bus system of claim 1, wherein the at least one bus line is electrical, optical, or radio-controlled.

13. (Original) The safety bus system of claim 1, wherein the at least one bus line includes at least one signal line.

14. (Currently Amended) A tabletting machine comprising :

a plurality of first bus-capable modules each being connected to at least one sensor and at least one actuator, said sensor configured to sense operational characteristics of a respective machine component in the tabletting machine and said actuator configured to actuate said respective machine component;

at least one second bus-capable module connected to at least one safety function;

at least one bus controller configured to control the respective machine components via the corresponding first bus-capable modules; and

at least one bus line interconnecting the first and second bus-capable modules and the at least one bus controller,

wherein when the safety function is selected, the bus-controller variably controls the respective machine components based on the sensed operational characteristics and a type of the safety function such that a number of various flexible safety concepts are applied the to tabletting machine.